



Model **J3**-2200



Doc: J3/2200/01

Nov 2007

Electrically operated 2 way 316SS ball valve

Full bore 2 way 2 piece 316 stainless steel ball valve, designed for automation with integrally cast ISO5211 actuator mounting platform fitted with direct mounted **J3** electric actuator. Supplied assembled and dry bench function tested. Full size range from 1/4" to 4".



Type	Function
J3-2203	Standard power to open - power to close - Stays put on mains failure
J3-2204	Failsafe BSR - Battery Spring Return - Fails to safe position using an internal battery
J3-2205	Modulating DPS - Digital Positioning System

Applications:

Water, oil and many corrosive medias, subject to compatibility with wetted parts in contact with media. Actuators sized on a maximum differential pressure of 10 bar wet service, if the intended duty is above this differential, or dry (air or gas) call to check actuator sizing as a larger output actuator may be required.

Maximum working temperature of assembly is +70C. If the intended duty is a higher temperature than this, select model **J3-2210** which has a mounting kit between the valve and actuator which uses air cooling to dissipate the heat away from the actuator (maximum +130C).

Valve Specifications:

Body	CF8M Cast 316SS
Ball	CF8M Cast 316SS
Seats	RTFE
Pressure rating	UTI 2" 1000psi CWP
Valve temp limits	-20 to +200°C
Actuator temp limits	-20 to + 70°C



Status light basic functions:

Constantly lit LED The LED flashes with 2 blinks

If the actuator is operating correctly with no faults, the LED shows a constantly lit light.

If the actuator has been left in 'manual' mode, the actuator's motor runs but doesn't drive the output shaft. After a pre-set time, the actuator knows that as the torque limiter has not activated and that the motor is running, it must be in manual.

The LED flashes on/ off

When the actuator senses an impending valve jam, the electronic torque limiter is activated and on activation, repeatedly flashes the LED on and off.



Quick guide to the **J3** electric actuator standard features :

Highly visible LED light gives continuous actuator status indication.

J3 L - 12-24V AC/DC

J3 H - 80-240V AC/DC

Multi-voltage capable with auto-voltage sensing:

Torque output: range:
25~95Nm Break
20~80Nm Reseat

Electronic torque limiter
Protects against valve jams

Anti-condensation heater

Manual override

All connections via external DIN plugs ~ no need to remove cover to connect

Volt free end of travel confirmation switches

IP65 weatherproof housing

CE marked

Traceable sequential serial numbering system

Optional failsafe kit (Battery Back-up) - actuator fails to safe position on power failure

Optional modulating kit with digital positioning system, either 0-10V or 4-20mA



Model J3

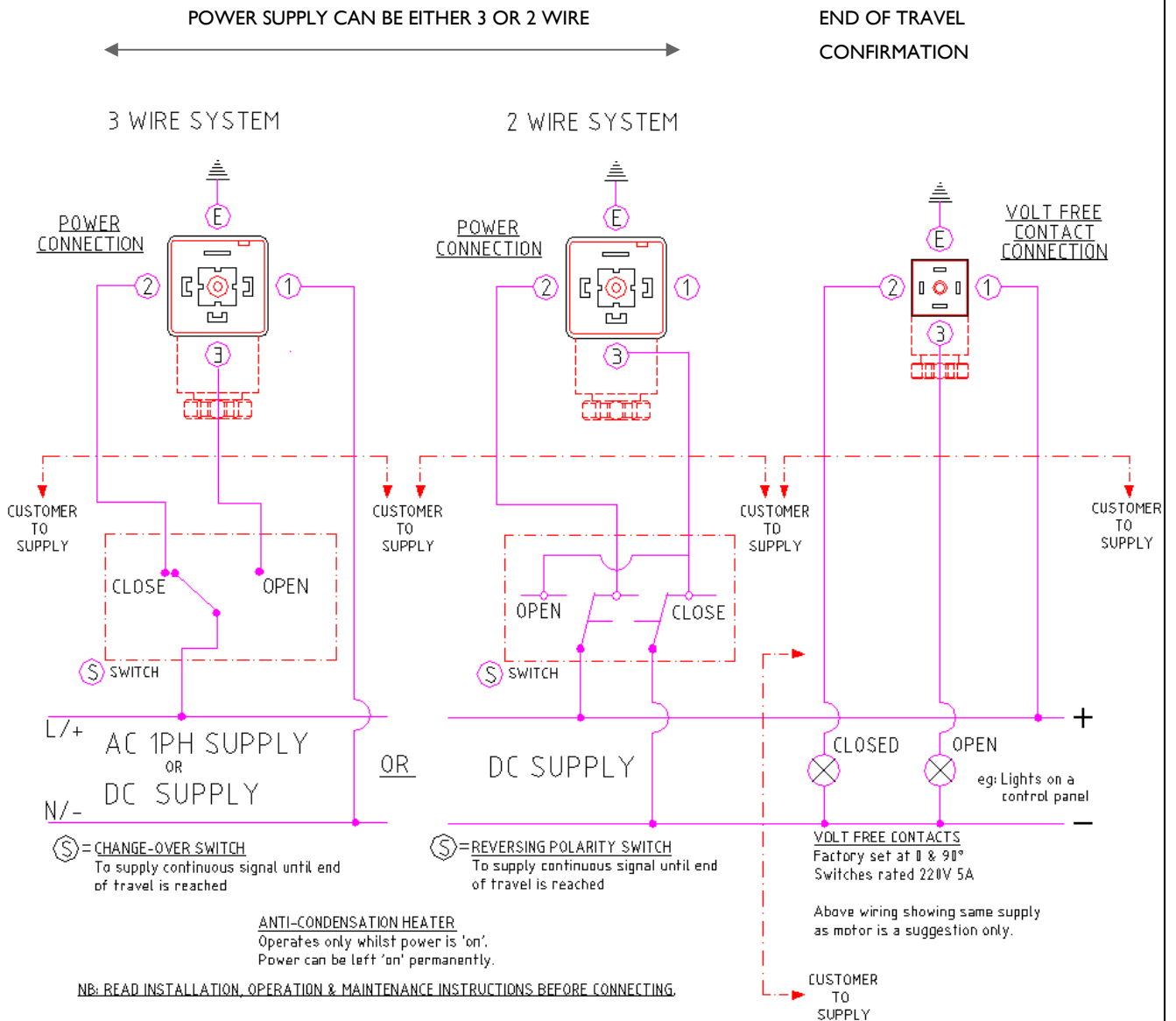
Wiring Diagram - AC or DC



Doc: J3/STD.WD/01

Jan 2008

AC (1ph) OR DC SUPPLY - WIRING FOR ON-OFF OR FAILSAFE ACTUATORS



FUNCTION: ON-OFF VERSION

Power open, power close
Stays put on mains power failure

FUNCTION: FAILSAFE VERSION

Power open, power close - trickle charges battery system in either open or closed position
Actuator sent by battery power to pre-set failsafe position on power failure
Actuator returns to pre-failure position on power resumption.
Failsafe can be either NC (normally closed) or NO (normally open)



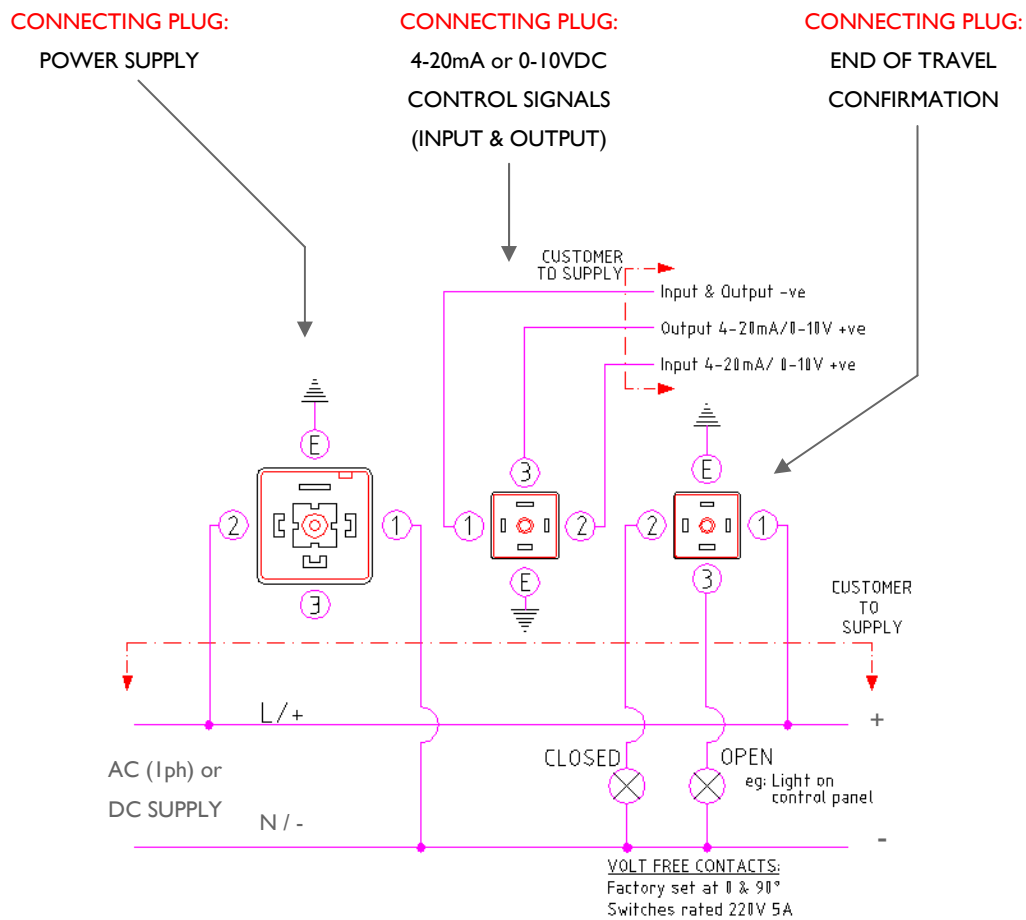
Model **J3** Wiring Diagram - AC or DC



Doc: J3/STD.WD/01

Jan 2008

AC (1ph) OR DC SUPPLY - WIRING FOR MODULATING ACTUATORS



Above wiring showing same supply as motor is only a suggestion.

NB: READ INSTALLATION, OPERATION & MAINTENANCE INSTRUCTIONS BEFORE CONNECTING.

FUNCTION: MODULATING VERSION

Power open, power close - actuator movement controlled by input signal (4-20mA or 0-10VDC)
Standard operation: 4mA or 0V = actuator closed, 20mA or 10V = actuator open (can be reversed)
Standard operation: Actuator closes on loss of control signal, stays put on loss of mains power
Output signal (in same format as supply signal) provided as standard.



Model **J3-2200**

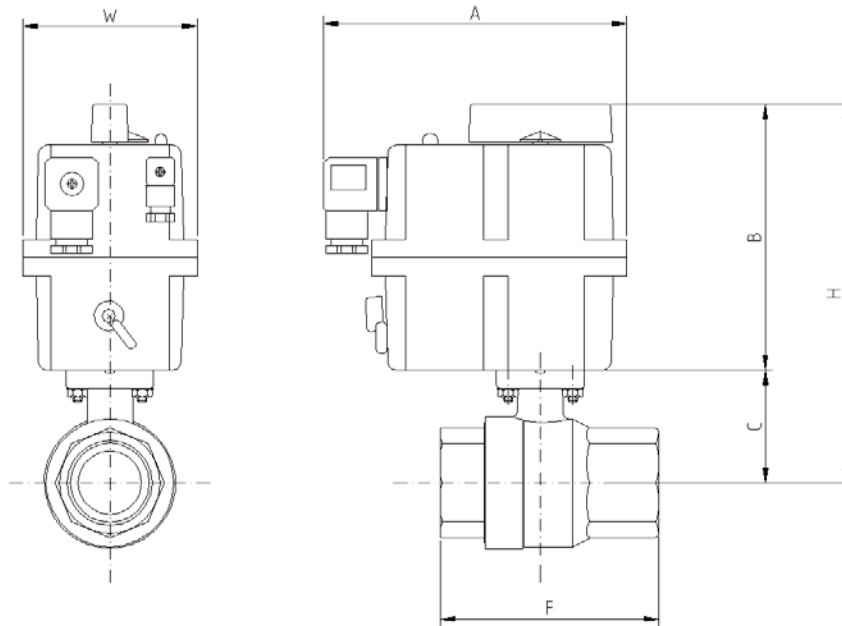
DIMENSIONS



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Electrically operated 2 pce stainless steel ball valve - Dimensions (to nearest mm)



Dimensions remain unchanged for all versions (on-off, failsafe & modulating)

	Model	A	B	C	F	H	W	Kilos	Kv
1/4"	20	177	149	39	65	188	110	2.1	6.8
3/8"	20	177	149	39	65	188	110	2.1	6.8
1/2"	20	177	149	39	65	188	110	2.1	12.8
3/4"	20	177	149	47	75	196	110	2.1	29.1
1"	20	177	149	57	88	206	110	2.6	47.8
1 1/4"	20	177	149	61	102	210	110	3.0	72.6
1 1/2"	35	177	171	78	110	249	110	4.4	106.8
2"	35	177	171	86	125	257	110	5.4	213.7
2 1/2"	55	177	196	109	161	305	110	9.4	273.3
3"	85	177	196	118	178	314	110	12.4	495.3

Kv is in m³/hr, based on water at ambient temperature with a 1 bar pressure drop across the valve

Subject to alteration without notice. Uncontrolled copy, not subject to automatic updates



Valve Data Sheet



Doc SBV-M22/03

Nov 2007

Full bore direct mount 2 piece stainless steel ball valve



Specifications:

Construction	2Pce full bore direct mount ball valve
Size Range (Full)	1/4" to 3" BSP
Pressure Rating	1000 psi max
Valve Body Material	ASTM A351CF8M
Trim Material	ASTM A351CF8M
Seat Material	PTFE
Seal Material (Options)	PTFE
Inspection & Test	API 598 BS6755 Pt 1
Standards	ANSI B16.34, ANSI I6.25, ANSI B1.20, API 6D ISO5211 DIN 259, DIN 2999, DIN3337. MSS SP25
Certification	EN 10204 3.1b on request
Temperature Range	-20 to +200C

Approvals:

Approved ?



PED/97/23/EC



ATEX 94/9/EC
II 2 GD



API 607 4th Ed'n /
BS6755 Pt 2



TA-Luft



DIMENSIONS (mm)

SIZE	∅C	E	F	∅G	H	H1	H2	∅I	∅K	L	W	kg/w	ISO5211
1/2"	15.0	132	9	1/2" NPT or BSP	38.6	7.1	72.6	42	36	65.0	16	0.46	F03/F04
3/4"	20.0	132	9	3/4" NPT or BSP	46.2	8.0	81.4	42	36	74.5	17	0.60	F03/F04
1"	25.0	167	11	1" NPT or BSP	56.6	11.4	95.1	50	42	88.0	21	1.09	F04/F05
1 1/4"	32.0	167	11	1 1/4" NPT or BSP	61.0	11.4	99.5	50	42	102.0	22	1.5	F04/F05
1 1/2"	38.0	187	14	1 1/2" NPT or BSP	76.3	15.2	110.8	70	50	110.0	22.5	2.55	F05/F07
2"	49.0	187	14	2" NPT or BSP	84.1	15.1	118.6	70	50	125.0	24	3.60	F05/F07
2 1/2"	65.0	262	17	2 1/2" NPT or BSP	108.7	16.8	166.2	102	70	160.6	31	7.43	F07/F10
3"	80.0	262	17	3" NPT or BSP	117.4	18.1	174.9	102	70	178.0	34	10.35	F07/F10

